

Composite Bearing

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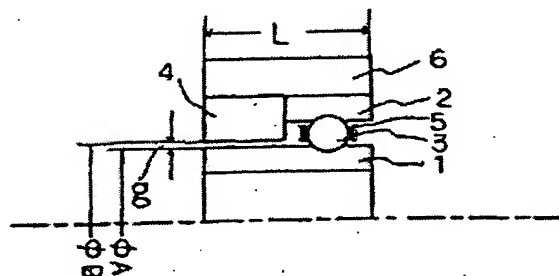
Cited documents:

GB1382037
GB1042549
FR1464889
US3301611
JP10064002

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Abstract of EP0940592

A composite bearing has an outer ring 2 and an inner ring 1 arranged coaxially with a space between them, and ball grooves in the opposing surfaces of the inner ring and outer ring, with balls 3 which can rotate freely in the grooves. A friction bearing 4 is arranged between the outer ring and inner ring on at least on one side of the balls, which is cylindrically-shaped and has, for example, an outer part fixed to an outer ring sleeve 6, and an inner surface providing a bearing part against the inner ring 1, with a gap g having a specified value for restricting the permitted range of inclination of the inner and outer rings.

Fig. 1

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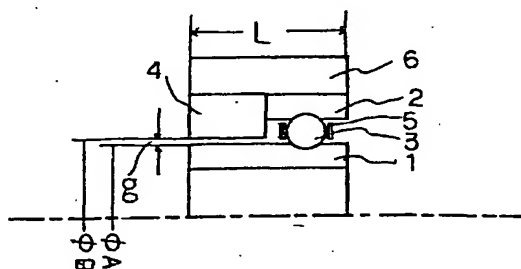
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(54) Combined ball bearing and sliding bearing

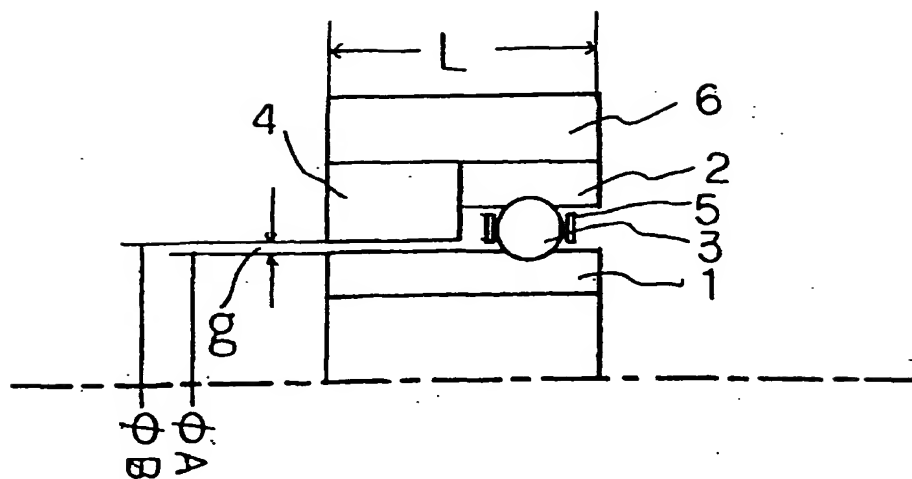
(57) A composite bearing has an outer ring 2 and an inner ring 1 arranged coaxially with a space between them, and ball grooves in the opposing surfaces of the inner ring and outer ring, with balls 3 which can rotate freely in the grooves. A friction bearing 4 is arranged between the outer ring and inner ring on at least on one side of the balls, which is cylindrically-shaped and has, for example, an outer part fixed to an outer ring sleeve 6, and an inner surface providing a bearing part against the inner ring 1, with a gap g having a specified value for restricting the permitted range of inclination of the inner and outer rings.

Fig. 1



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F i g . 1



F i g. 2

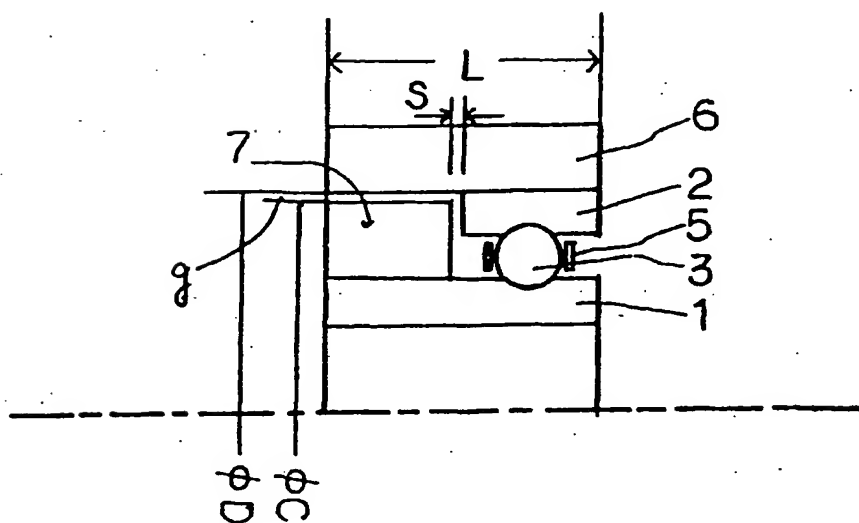


Fig. 19
[PRIOR ART]

